

# SD103AW - SD103CW

## 400mW Schottky Barrier Switching Diode



**SOD-123**

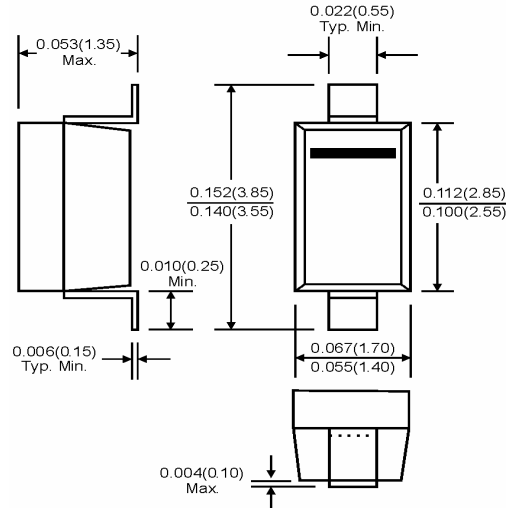


### Features

- Low forward voltage drop
- Guard ring construction for transient protection
- Negligible reverse recovery time
- Low reverse capacitance

### Mechanical Data

- Case: SOD-123, plastic
- Polarity: Cathode band
- Terminals: Solderable per MIL-STD-202, Method 208
- Marking: Date Code and Type Code or Date Code only
  - Type Code: SD103AW S4
  - SD103BW S5
  - SD103CW S6
- Weight: 0.01 grams (approx.)



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

#### Maximum Ratings

Type Number	Symbol	SD103AW	SD103BW	SD103CW	Units
Peak Repetitive Reverse Voltage	VRRM	40	30	20	V
Working Peak Reverse Voltage	VRWM				
DC Blocking Voltage	VR				
RMS Reverse Voltage	VR(RMS)	28	21	14	V
Forward Continuous Current (Note 1)	IFM	350			mA
Non-repetitive Peak Forward Surge Current @ t ≤ 1.0s	IFSM	1.5			A
Power Dissipation (Note 1)	Pd	400			mW
Thermal Resistance Junction to Ambient Air (Note 1)	RθJA	300			°C /W
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 125			°C

#### Electrical Characteristics

Type Number	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage (Note 2) SD103AW IR=100uA SD103BW IR=100uA SD103CW IR=100uA	V(BR)	40 30 20		-	V
Peak Reverse Current SD103AW VR=30V SD103BW VR=20V SD103CW VR=10V	IR	-	-	5.0	uA
Forward Voltage Drop	VF		-	0.37 0.60	V
Junction Capacitance VR=0, f=1.0MHz	Cj	-	50	-	pF
Reverse Recovery Time IF=IR=200mA Irr=0.1 x IR, RL=100Ω	trr	-	10	-	nS

Notes: 1. Valid Provided that Terminals are Kept at Ambient Temperature.  
2. Pulse Test: Pulse width = 300uS, Duty cycle ≤ 2%..

# RATINGS AND CHARACTERISTIC CURVES (SD103AW - SD103CW)

FIG.1- TYPICAL FORWARD CHARACTERISTICS

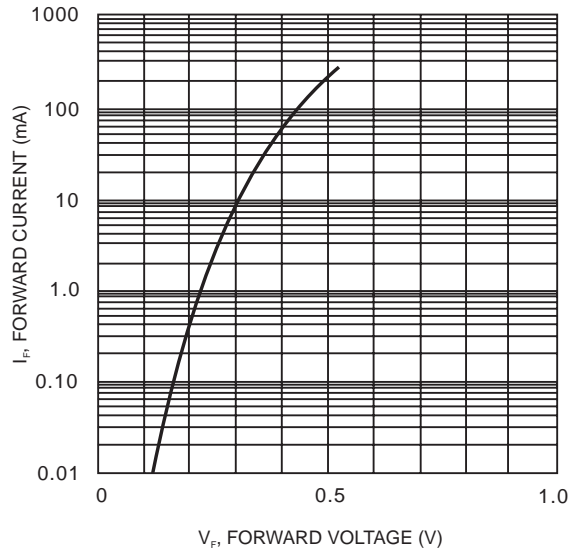
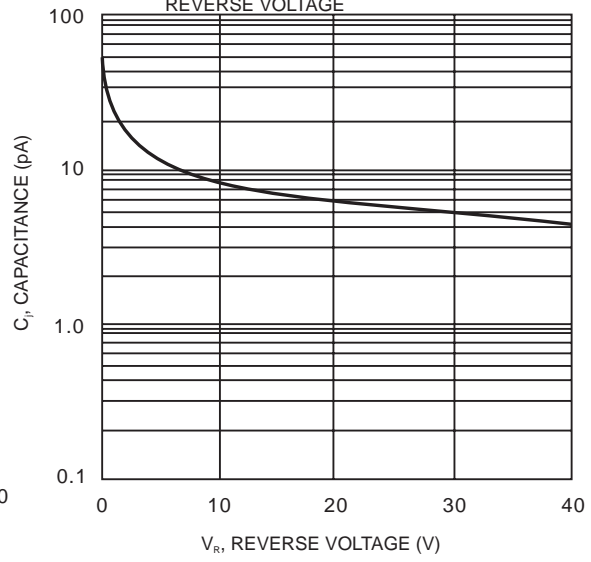


FIG.2- JUNCTION CAPACITANCE VS REVERSE VOLTAGE



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